fortéBIO

interactions

WINTER 2010 • VOLUME 3 • ISSUE 1

WWW.FORTEBIO.COM

New Octet QK^e System

Sriram Kumaraswamy, Ph. D., Product Manager, skumaraswamy@fortebio.com, Huddee J. Ho, Ph. D., Director, Hardware Engineering, hho@fortebio.com

ForteBio launched the Octet QK^e system for protein quantitation and kinetic characterization at PepTalk 2010. The Octet QK^e is the newest addition to the Octet platform of BioLayer Interferometry-based instruments that monitor binding interactions label-free, and in real time. It contains the same high-performance spectrometer used in the Octet RED system, greatly improving its signal to noise resolution over that of the first-generation Octet QK system. Octet QK^e offers two acquisition rate settings, yielding greater sensitivity and dynamic range in quantitation and kinetic analysis assays. And, biosensor re-racking increases assay flexibility and provides operational cost savings. All of these enhancements are packaged in a system with the same compact footprint as the Octet QK and RED systems.

NEW ACQUISITION RATE SETTINGS

Using the High Sensitivity acquisition rate setting of 0.3 Hz (1 data point per 3.3 seconds), the software performs 40 averages per data point. The higher number of averages reduces noise in the signal, providing enhanced sensitivity for quantitating proteins. For example, using Protein A biosensors and a 1000 rpm shaking speed, the Octet QK^e detects as little as 30 ng/mL human IgG in just 5 minutes in a direct binding assay. Using the Standard acquisition rate setting of 0.6 Hz (1 data point per 1.6 seconds), 5 averages are performed per data point. In a 2-minute assay using Protein A biosensors and low rpm, up to 700 µg/mL of human IgG is reliably detected. This represents more than 4 logs dynamic range for protein concentration measurement, attainable in a label-free direct binding assay

continued on page 3

FIGURE 1. Octet QK^e instrument

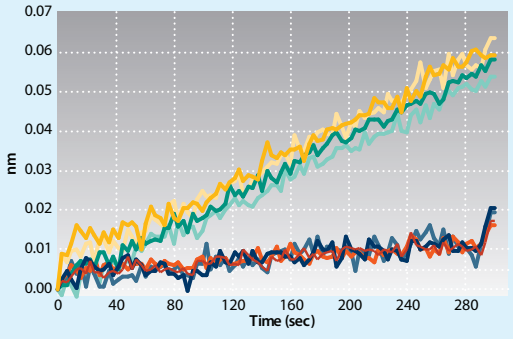


FIGURE 2. At the High sensitivity acquisition rate setting of 0.3 Hz and 40 averages, a 30 ng/mL hIgG sample can easily be differentiated from background signal on a Protein A biosensor.

INSIDE THIS ISSUE

Customer-Centered Innovation Fuels Growth!

Christopher Silva, Vice President, Marketing, csilva@fortebio.com

I would like to thank you, our Octet customers, for your loyalty and support during 2009. I am pleased to report that in the last year, despite the challenging economic times, ForteBio achieved all of its intended major milestones and continued its high, double-digit growth. This growth was fueled largely by the launch of several innovative products, which, in tandem with our focus on customer support, were rewarded with strong acceptance by our customers. Furthermore, our market position as the number 2 instrumentation provider in the label-free biosensor sector was confirmed this month by Strategic Directions International (SDi), a leading market analysis firm for analytical and life sciences instruments.

Our biggest 2009 milestone was the launch of the Octet 384 system series, which is proving popular based on rapidly growing sales. Octet 384 systems perform protein-protein, antibody, peptide, small molecule and fragment binding assays using simultaneous 16-channel detection, 384-well microplate capability, re-racking of biosensors and integration to robots. These features enable low assay volumes of 40 µL, fast time-to-results, high sample throughput and reduced running costs. Octet 384 systems have been integrated to robots from Tecan, Hamilton Robotics and Hudson Robotics.

Another major milestone was expanding and strengthening our Dip and Read™ biosensor assay offerings for biotherapeutics development and bioprocess markets. The newly launched generic kit for immunogenicity, the kit for residual protein A contamination detection and the biosensor for direct HIS-tagged protein quantitation have all found eager users. Finally, during the latter part of 2009, we initiated our Custom Biosensor Assay Development Service in response to customer requests to develop proprietary assays for Octet users. We have received contracts to develop custom assays and will be strengthening our organization's structure to expand this capability.

Further, at Cambridge Healthtech Institute's (CHI) PepTalk conference in San Diego earlier this month, we launched the Octet QK^e — an 8-channel system with a high-performance spectrometer, variable acquisition rates and the ability to re-rack biosensors. The Octet QK^e system is significantly more sensitive than the first generation Octet QK system, enabling analysis of very small proteins and peptides. Biosensor re-racking enables assay workflow flexibility and decreases running costs. All signs point towards the Octet QK^e becoming our most popular entry-level system.

Looking ahead, in 2010 we plan to launch three more biosensor chemistries as well as new hardware and software capabilities to expand our current solutions. Lastly, you may have noticed that ForteBio has enhanced its customer communications and feedback mechanisms. We've added "Quick Links" to www.fortebio.com web pages, enabling you to suggest new types of biosensors, read product and company updates, contact Customer Support, request a quote and view a list of upcoming conferences where ForteBio representatives would welcome the opportunity to meet with you.

We look forward to hearing from each of you during this year and plan to support your next critical application.

ForteBio Offers Custom Biosensor and Assay Development Services

John Proctor, Ph.D., Product Manager, jproctor@fortebio.com

In response to customer requests, ForteBio recently launched a new service program in which it will develop customized, proprietary biosensor assays for customers to use on the Octet instrumentation platform, saving customers significant time and costs associated with developing the assays themselves. The new service enables ForteBio customers to obtain finished, quality-controlled biosensors and assay kits that are developed with the customers' capture reagents and analytes. The program is already proving to be popular — in its first few months, it has received significant contract orders!

The services include, but are not limited to, antibody purification, biosensor coating process development, biosensor QC method validation, custom biosensor production, and full assay development services. Assays will be tailored to customer specifications and customers are involved throughout the process to ensure the customized product meets their specifications prior to final production.

We are excited about the new program and look forward to working with our customers to build robust assays for the Octet system. We hope this program makes running custom assays even easier by providing customized out-of-the-box solutions.

For more information or to find out how to order custom biosensors, please email me at jproctor@fortebio.com.

EDITOR'S NOTE:

Contribute to *Interactions*!

I would like to extend an open invitation to all Octet users to contribute technical articles for publication in *Interactions*. *Interactions* is circulated at more than 10 life science industry conferences and trade shows attended by ForteBio, distributed across the world by our sales representatives and distribution partners and is available online via our website. Your articles in *Interactions* will be viewed by several thousand researchers worldwide.

I welcome you to write about your field of work, how you're using Octet systems in your lab, and to include illustrative data. To learn more about contributing a technical article, please email me a brief note on your topic at skumaraswamy@fortebio.com.

— Sriram Kumaraswamy, Editor

Introducing the New Octet QK^e System

continued from page 1

that measures a 96-well plate of samples in just 30 minutes!

The Octet QK^e system provides enhanced performance for kinetic analysis of proteins and peptides in comparison to the Octet QK system in the following two ways:

- Lower molecular weight proteins and peptides can be detected and analyzed;
- The binding data for proteins or peptides at different concentrations can be better resolved, reliably determining kinetic constants.

NEW BIOSENSOR RE-RACKING

The Octet QK^e system's biosensor re-racking provides enhanced flexibility in loading ligands on biosensors and reduces operational costs, especially when precious target reagents are loaded on biosensors. Additionally, re-racking allows all 96 biosensors in a tray to be batch regenerated after an experiment offline, saving valuable assay time. These enhancements to your workflow, in combination with all of the data quality improvements, make the Octet QK^e system a superior and value-added alternative to other label-free instruments for your assays.

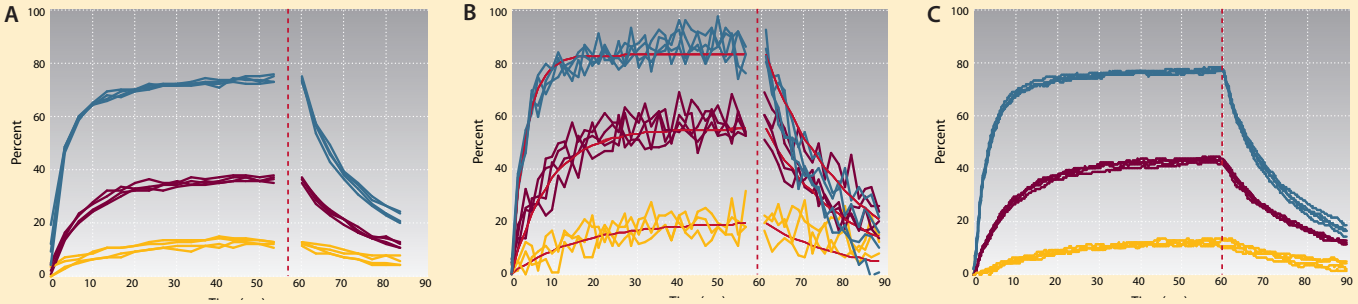


FIGURE 3: Comparison of the binding of insulin (5.8 kDa) to biotinylated anti-insulin antibody anchored on Super Streptavidin biosensors on Octet QKe (1A), Octet QK (1B), and Octet RED (1C). The Octet QKe data was obtained using the Low acquisition rate setting of 0.3 Hz and 40 averages. The Octet RED data was obtained using 5 Hz acquisition rate and 20 averages and the Octet QK data was obtained using a 0.6 Hz acquisition rate and 5 averages.

Octet Software Version 6.3 Launched

Ease-of-Use, Fast Assay Setup and Powerful Data Analysis

Sriram Kumaraswamy, Ph. D,. Product Manager, skumaraswamy@fortebio.com

ForteBio has released a new software version 6.3 for data acquisition and data analysis on the Octet platform. The new software version is available for use on all Octet systems currently supported by ForteBio: Octet QK, QK^e, RED, QK384 and RED384. Version 6.3 builds on the powerful data acquisition and data analysis modules of the earlier version with exciting new features for greater flexibility and ease-of-use, faster time-to-results, new curve fitting models and data processing features.

Octet software version 6.3 enables subtracting reference biosensors from target biosensors during data acquisition, thus displaying reference-subtracted data in real time. The new Threshold feature, allows you to direct the Octet system to terminate any kinetics assay step when the real-time binding signal for that step reaches a threshold value or slope.

You can align the data in the Runtime binding chart to the signal in any step of the assay. You can open and review completed experiments in the Runtime Binding Chart view.

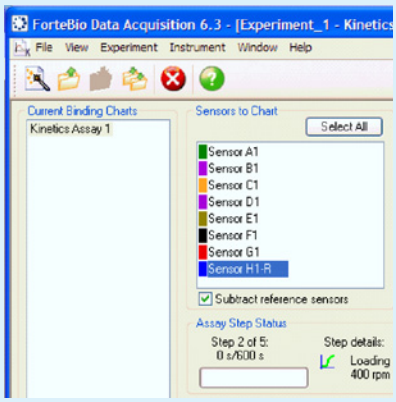


FIGURE 1: Octet software version 6.3 allows reference subtraction during data acquisition..

The data analysis functions of Octet Software version 6.3 allow you to apply standards from within a plate or apply one set of standards across many plates of data. Its new mass transport binding model can extract true binding constants for your interaction system. Batch mode analysis of quantitation data files allows processing any number of data sets in one procedure, providing tremendous time savings. Analysis settings can be saved for quantitation and processing and analysis parameters can be saved for kinetics so that a data file can be re-opened with the previously applied processing steps.

Octet Software version 6.3 is available as a free upgrade to all current version 6.x users. It is also available as a paid upgrade for Octet Software version 4.0 users. Please contact your local ForteBio representative or email sales@fortebio.com to obtain the upgrade.

Using Octet QK for the Quantitation of a Humanized IgG2 Therapeutic in Cynomolgus Monkey Plasma

Enabling Ligand Binding Assay Reagent Development

Mark Dysinger[a], Lindsay E. King[a], and Islay Campbell[b]

HIGHLIGHTS

- Label-free reagents
- Compatible with complex matrices
- Wider dynamic range
- Minimal dilutions
- Fast assay development
- No wash steps, as required in ELISA
- Fewer full-time employees needed

The following data were presented by Mark Dysinger and Lindsay King as a poster at the 2009 American Association of Pharmaceutical Scientists (AAPS) annual meeting[1]. The purpose of this work was to determine the quantitative capabilities of the Octet QK system that utilizes BioLayer Interferometry (BLI) technology in comparison to a validated chemiluminescent ELISA for potential use for regulated TK sample analysis.

Quantitation of analytes using ligand binding assays is a well established approach with multiple detection modalities (colorimetric ELISA, electrochemiluminescence, fluorescence, etc). On the other hand, label-free technologies such as Surface Plasmon Resonance (SPR) on the Biacore platform are well established for the evaluation of binding kinetics. Recently, these technologies are also emerging as approaches for the quantitation of analytes.

ForteBio's Octet system utilizes BioLayer Interferometry (BLI) technology to directly measure the binding of unlabeled analyte in real-time to a ligand immobilized on a biosensor tip surface. This platform can be used for both kinetic and quantitative analyses of analytes.

The gold standard for large molecule analyte quantitation is ELISA. For the purposes of this investigation reagents used in a previously validated sandwich ELISA assay were used to construct an Octet BLI assay that was analytically qualified to determine the technology's potential use in TK sample analysis. The analytical qualification parameters used to define the acceptable limits in which the data are deemed reliable are as follows:

- **Regression Model** — Fifteen standard concentrations ranging from 100 µg/mL to 0.25 µg/mL analyzed on each of five days (single replicate each).
- **Accuracy and Precision** — Seven sample concentrations (ULOQ, HQC, MHQC, MQC, MLQC, LQC, LLOQ) analyzed in triplicate on each of five days.
- **Matrix Evaluation** — Ten individual lots of matrix (no humanized IgG_2 added) analyzed for potential assay interference/background.
- Selectivity Evaluation — Same ten individual lots of matrix spiked with humanized IgG2 at HQC and LQC levels and analyzed for potential assay interference.

TABLE 1

Analytical Qualification Results Summary		
	QPS ELISA Validation	**Octet QK Qualification**
Quantifiable Range	0.1–10 µg/mL	0.4–50 µg/mL
No. QC Levels Tested	5	7
Inter-assay Precision	7.2–10.9%	5.9–15.8%
Inter-assay Accuracy	-3.9–5.6%	-13.4–6.2%
Matrix Evaluation	100%	100%
Selectivity	90%	90%

TABLE 2

Octet QK vs ELISA Operational Comparison		
	ELISA	**Octet QK**
Assay Run Time	2.5 hours	2 hours with O/N incubation 4 hours with RT incubation
Cost Per Sample	~ $0.10/sample	~ $6/sample without regeneration*
Throughput	Up to 120 samples/day in duplicate	Up to 52 samples/day in duplicate**
FTE Time	~ 2 hours, compatible with automation	~ 1 hour, instrument used not compatible with automation**

*Biosensor regeneration is available, but was not evaluated in this study. On the Octet QK, it possible to regenerate biosensors up to 10 times, therefore, potentially reducing the cost to ~ $0.60/sample.

**The Octet QK is not robot compatible, however the new Octet QK384 is. In addition, the QK384 allows use of 384 well plates, analysis of 16 wells simultaneously, and re-racking of biosensors which would increase throughput and decrease cost/sample without impacting FTE time.

Qualification Notes

- Each sample, 1 replicate = 2 biosensors/well
- Standards and qualification samples were generated on a Hamilton Star automated system

A five-day qualification of the Octet QK yielded accuracy, precision, and selectivity results that were comparable to those of the chemiluminescent ELISA validation. Although the Octet platform appears very different from ELISA, the actual experiments for analytical validation/qualification were essentially identical. Accuracy and precision results were generated from seven QC sample levels (ULOQ, HQC, MHQC, MQC, MLQC, LQC, LLOQ), and selectivity results were generated from high and low concentrations of therapeutic spiked into ten individual lots of monkey

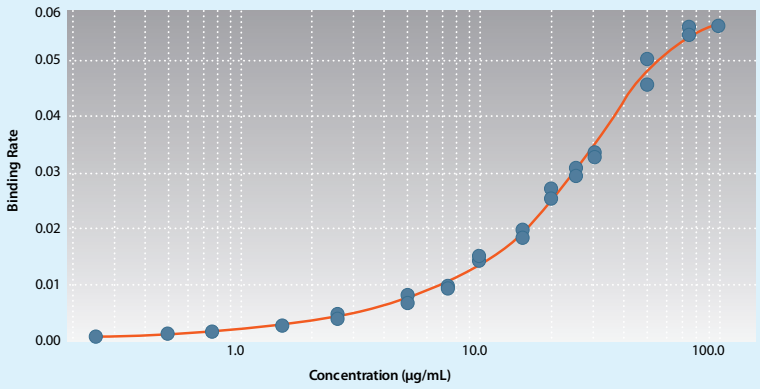


FIGURE 1: Standard curve showing binding rate of standard samples plotted as a function of concentration in Octet data analysis software.

plasma. The dynamic range for the assay was established at 0.4–50 µg/mL (compared to 0.1–10 µg/mL in the ELISA validation). The minimum required dilution was 1:2 versus 1:10 used in the ELISA. For assay selectivity, 90% of lots tested within 100±20% recovery.

Although the Octet BLI assay did not have as low an LLOQ value as the ELISA assay (0.4 µg/mL vs. 0.1 µg/mL), the dynamic range was greater. The Octet assay has a 1:2 required minimum dilution whereas the ELISA requires a 1:10 minimum dilution which suggests that there was less matrix interference in the Octet BLI assay.

Label-free technologies are becoming established in Ligand Binding Assay (LBA) reagent development. Instruments such as Biacore, dotLab, and Octet are used to determine reagent specificities and relative affinities, which aid in the characterization and subsequent selection of these reagents for assay development and optimization. Based on our observations during this investigation, the Octet system is simple to use and requires minimal hands-on training. Data analysis is executed via Octet software, allowing for linear, 4PL, or 5PL regression. The minimal assay prep and absence of wash steps result in less direct FTE time compared to ELISA. Assay development was fast, results are generated in real time, label-free reagents can be used, and the technology is compatible with complex samples as demonstrated by the 1:2 minimum required dilution. With the addition of an available CFR Part 11 compliant software package, this Octet BLI assay could be applied for the quantitation of biotherapeutics in a regulated environment.

The ability to quantify an analyte of interest in complex matrices while using label free reagents gives Octet a unique niche. The ability to see results in real time confirms assay functionality. The data presented support the use of the Octet QK system for the quantitation of a humanized IgG2 therapeutic in cynomolgus plasma. Furthermore, the extended dynamic range (as compared to the validated ELISA method) of the qualified assay suggests that it would be of particular utility in TK studies where animals are typically dosed with high amounts of drug.

REFERENCES

1 Dysinger, M. and King, L.E. Use of Bio-Layer Interferometry (Octet) for the Quantitation of a Humanized IgG2 Therapeutic in Cynomolgus Monkey Plasma; *The AAPS Journal*. 2009, 11(S2); 2329.

FORTEBIO NOTES

ForteBio's Octet platform consists of the Octet QK, Octet QK^e, Octet QK384, Octet RED and Octet RED384 systems, each with distinctive capabilities. The data described in this note were generated on the Octet QK system, which is a first-generation instrument. The other Octet systems have been outfitted with higher performance spectrometers that provide higher signal to noise resolution and thus, greater sensitivity. The Octet RED and RED384 provide the broadest dynamic range for quantitation and kinetic analysis, greatest sensitivity, ability to measure small molecule : protein binding and ability to measure fast binding interactions.

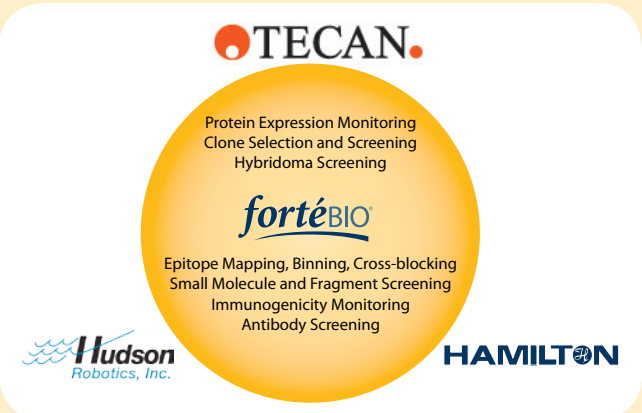
a Pfizer Global Research and Development, Groton/New London Laboratories, Pfizer, Inc, Groton, CT 06340

b ForteBio, Inc, Menlo Park, CA 94025

Introducing Octet System Automation Partners

The Octet QK384 and Octet RED384 systems have been designed with an open architecture that enables integration with robotic systems, providing rapid results and complete walk-away screening for thousands of samples and binding interactions. To create a turnkey robotic solution, ForteBio and Tecan have collaborated to automate Octet 384 systems with the Freedom EVO robot.

ForteBio's customers have integrated their Octet 384 systems with automation solutions offered by providers including Tecan, Hamilton Robotics and Hudson Robotics. The automation-friendly architecture of the Octet 384 systems gives users the freedom to select the automation provider of their choice. For more information regarding automation on the Octet platform, please email support@fortebio.com.



TECHNICAL TIP:

Performing Assays with Reduced Sample Volumes and Improved Sensitivity in Tilted-Bottom 384-Well Microplates

Krista Witte, Ph. D., Sr. Director of Chemistry and Consumables R&D, krista@fortebio.com

The 384TW microplate is a new 384-well, tilted-bottom, black, polypropylene microplate whose sloped well bottom has been specifically designed to provide benefits not provided by standard 384-well microplates on the Octet RED384 and Octet QK384 systems:

- 3- to 5-fold reduction in required sample volume — only 40 µL for both quantitation and kinetic applications
- Reduction in the interference from light reflecting off the bottom of the plate reduces background noise for high-sensitivity applications such as small molecule kinetics or fragment screening

The 384TW microplate conforms to SBS standard dimensions and is compatible with standard laboratory robotics systems. It can be filled using standard multichannel pipettes and automated liquid handlers.

INSTRUCTIONS FOR USE

The 384TW is compatible with the Octet RED384 and Octet QK384 systems. Assays are set up and run as one would in flat-bottom 384 well microplates with the following exceptions:

- Minimum sample volume is 40 µL. Maximum sample volume is 100 µL.
- Care should be taken when pipetting solution into the wells to prevent air bubbles from being trapped in the wells — bubbles can result in spikes in the assay data.
- Set up the assay with the sensor offset at 3 mm. For more information on Sensor offsets and how to set them, please refer to the Octet 384 System Data Acquisition User Guide.
- Set the "Delay experiment start" option in the Octet Data Acquisition software to a minimum of 10 minutes (600 seconds) to allow the plate to equilibrate inside the instrument prior to the first data point.
- Always check the "Shake sample plate while waiting" option in the Data Acquisition software. Shaking the plate during equilibration helps eliminate bubbles from the wells.

PERFORMING ASSAYS USING LIMITED SAMPLE VOLUME

When assaying precious samples, the ability to limit the volume of sample per experiment is crucial. The 384TW enables sample volumes as low as 40 µL per well. This is a 3-fold decrease from the volume required in a standard 384-well microplate and a 5-fold decrease from the sample volume required in a 96-well microplate. The assay performance (dynamic range, precision, accuracy) of both kinetic and quantitation assays in tilted-bottom plates are equivalent to those in standard flat-bottom plates, as shown in the figures below.

IMPROVED SENSITIVITY IN SMALL MOLECULE AND PEPTIDE ANALYSES

In high-sensitivity screening and kinetics applications, the limit of detection (smallest significant signal) is often set at 3X the standard deviation of the baseline signal. The 384TW decreases Octet RED384/Octet QK384 system artifacts, decreasing the variation (and thus the standard deviation) of the baseline signal, enabling smaller signals to be resolved from the baseline noise.

Table 2 contains data from Octet RED384 using Super Streptavidin (SSA) biosensors. Data shown includes the average signal and standard deviation of the baseline of SSA biosensors in PBS. Averages and standard

continued on page 7

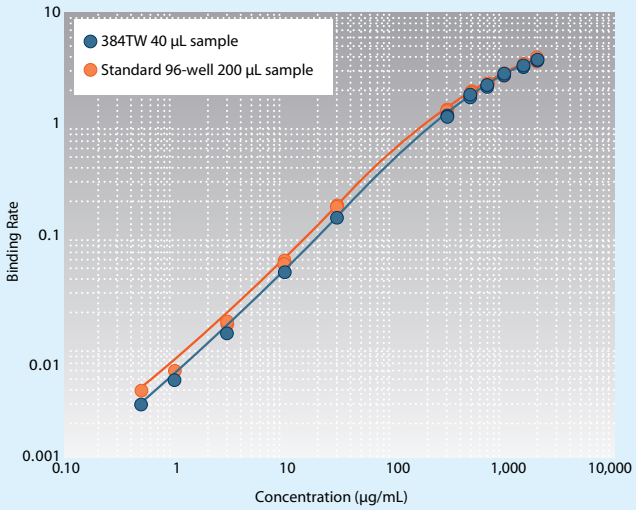


FIGURE 1: Calibration curve across the dynamic range of 0.5–2000 µg/mL hIgG; results from 384TW microplates compares very well to those from standard flat-bottom 96-well microplates.

Test Concentrations (µg/mL)	Measured Avg. Concentrations (µg/mL)		Percent CV	
	96-well	384TW	96-well	384TW
2000	2000.00	1999.98	12%	7%
1500	1508.78	1503.58	7%	3%
1000	1015.90	1007.08	7%	4%
700	700.20	700.70	2%	3%
500	503.03	502.53	3%	4%
300	300.50	300.88	2%	3%
30	30.10	30.05	3%	3%
10	10.01	10.00	3%	3%
3	3.00	3.00	3%	3%
1	1.00	1.00	1%	6%
0.5	0.50	0.51	4%	9%

TABLE 1: Measured concentrations and CVs show good dynamic range, recovery and precision using the 384TW vs. 96-well standard microplate.

New Anti-Penta-HIS Biosensor for Quantitating HIS-Tagged Proteins

Bettina Heidecker, Scientist, bheidecker@fortebio.com

The six-histidine or penta-histidine peptide tag (HIS-tag) is a common tag fused to recombinant proteins during cloning. Many tools have been developed for detection and purification of HIS tagged-proteins. The Anti-Penta-HIS biosensor, for use on the Octet system, provides a rapid, label-free one-step quantification method of HIS-tagged proteins. This new biosensor uses the highly specific Anti-Penta-HIS antibody from Qiagen pre-immobilized onto the biosensor to capture these proteins (Figure 1).

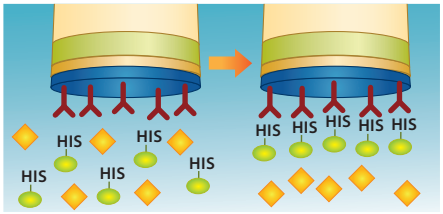


FIGURE 1: The Anti-Penta-HIS biosensor uses the highly specific Anti-Penta-HIS antibody from Qiagen pre-immobilized onto the biosensor to capture HIS-tagged proteins.

Protein quantitation utilizing the HIS-tag can be used in many steps of a protein production process, since the biosensor is compatible with column eluates, cell culture supernatant, and crude cell lysates. Sample dilution, depending on the crude matrix, is recommended. Proteins of different molecular weight can be quantified with a typical dynamic assay range from 0.25–200 µg/mL depending on the specific protein and the assay conditions, if run using the standard or high sensitivity assay protocols built into the latest version of the Octet software. Analysis of the binding data (Figures 2A and 2B) is straightforward using the Octet data analysis software, which offers many choices of binding rate calculations, enabling quantitation of a wide variety of HIS-tagged proteins.

For more information, or to order Anti-Penta-HIS biosensors, please email info@fortebio.com or visit www.fortebio.com.

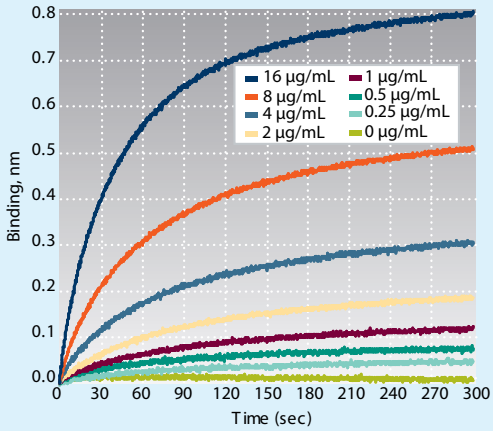


FIGURE 2A. Raw data for binding of various concentrations of HIS-tagged protein on the Anti-Penta-HIS biosensors.

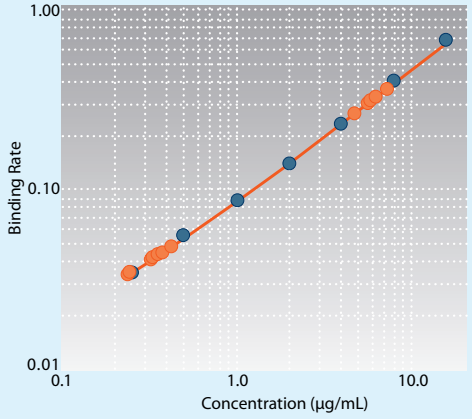


FIGURE 2B. Binding rate of unknown and standard samples plotted as a function of concentration in Octet data analysis software. The concentration of the unknown samples are interpolated from the standard curve.

Technical Tip: Tilted-Bottom 384-Well Microplates

continued from page 6

deviations were calculated from 1920 replicates each. The lower signal limit of detection shown is defined as 3 times the standard deviation over the average baseline. For many screening campaigns this would define the smallest signal that could be considered a positive binding sample. In this experiment the 384TW allows for the detection of approximately 2-fold lower signal than would be possible in the standard 384-well flat-bottom plate.

For more information on the 384TW microplate, please visit www.fortebio.com.

	384-well Flat-bottom Plate	384-well Tilted-bottom Plate
Average baseline signal	-4.8 pm	-2.0 pm
Standard deviation of the baseline signal	10.4 pm	4.3 pm
Lower signal limit of detection	26.4 pm	10.9 pm

TABLE 2: Averages and standard deviations calculated for the baseline signal in PBS buffer for Super Streptavidin biosensors on an Octet RED384 system using 1,920 replicates.

March – May 2010 Events

Visit us at any of our upcoming events to learn more about the Octet platform and ForteBio's other products that help make your workflow fast, accurate, and easy.

- **Mar 3–5** — **IBC Antibody Development & Production**
  Booth 309
  La Costa Resort & Spa Carlsbad, CA
  Exhibit Dates Mar 3–4

- **Mar 4** — **ELRIG — Liquid Handling and Label-Free Detection Technologies**
  Booth D2
  Silverstone, UK
  Exhibit Dates Mar 4

- **Mar 23–26** — **Analytica 2010**
  Halle A3, Booth 457
  Munich, Germany
  Exhibit Dates Mar 23–26

- **Apr 11–15** — **SBS 16th Annual Conference & Exhibition Advancing the Science of Drug Discovery**
  Booth 601
  Phoenix Convention Center, Phoenix, AZ
  Exhibit Dates Apr 13–15

- **Apr 27–29** — **CHI Drug Discovery Chemistry**
  Booth 19
  San Diego, CA
  Exhibit Dates Apr 28–29

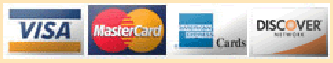
- **May 17–21** — **CHI PEGS**
  Booth 201
  The Sheraton Hotel, Grand Ballroom, Boston, MA
  Exhibit Dates May 17–21

- **May 16-19** — **2010 AAPS National Biotechnology Conference**
  Tabletop 31
  Hilton San Francisco, San Francisco, CA
  Exhibit Dates May 17–18

ForteBio now accepts credit cards for payment

ForteBio can now accommodate customers preferring to pay for orders with a credit card. Any quantity of biosensors or reagents can be purchased. Credit cards accepted are: VISA, Master Card, AMEX, and Discover.

SPECIAL NOTE: Depending on the amount of the order, the customer will be charged in $10,000 increments (the maximum for any single processing total line item at this time). For example: if the order is for $12,000 in biosensors, the customer will be charged for $10,000 on line 1 of their credit card and then $2,000 on line 2 on their credit card for a total of $12,000. $50.00 shipping/handling fee will be added to each credit card order.



For more information about ForteBio's Octet System for label-free, real-time detection, applications and services, visit www.fortebio.com or contact us directly.

EDITORIAL STAFF
Editor
Sriram Kumaraswamy
Assistant Editor
Tori Muir

Contributors
Islay Campbell
Mark Dysinger
Bettina Heidecker
Huddee J. Ho
Lindsay E. King
Sriram Kumaraswamy
John Proctor
Chris Silva
Krista Witte

Art & Design
Tori Muir

Miss or misplace an issue?
View issues online at
www.fortebio.com/interactions

fortéBIO®

ForteBio, Inc.
1360 Willow Road, Suite 201
Menlo Park, CA 94025
t: 888.OCTET-QK
or 650.322.1360

ForteBio, UK, Ltd.
83 Victoria Street, Suite 407
London, SW1H 0HW, UK
t: +44-(0)20-31784425

ForteBio (Aria Biotechnology Co. Ltd.)
917 Halley Road, Bldg 4
Zhangjiang High Tech Park
Shanghai, China 201203
t: +86-21-51320387

www.fortebio.com